

AMENDMENT TO THE CLAIMS

1. **(Currently Amended)** A method for identifying an agonist WSX receptor antibody with a strong binding affinity which decreases body weight or fat depot weight or food intake in an obese animal, comprising the steps of

(a) producing one or more agonist antibodies which specifically bind to the extracellular domain of a receptor having a WSX motif comprising the extracellular domain sequence within SEQ ID NO:2, and

(b) selecting the an agonist antibody antibodies produced in step (a) which induce a statistically significant decrease in body weight or fat depot weight or food intake in an obese animal binds to said extracellular domain with a Kd of no more than about 1×10^{-7} M

2. **(Currently Amended)** The method of claim 1 wherein said antibody decreases body weight or fat-depot weight or food intake in an ob/ob obese animal is an ob/ob mouse.

3. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) specifically bind to human receptor variant 13.2 (SEQ ID NO:2).

4. **(Currently Amended)** The method of claim 1 wherein said antibodies produced in step (a) bind to the extracellular domain of said receptor having a WSX motif with a Kd is of no more than about 1×10^{-8} M.

5. **(Previously Amended)** The method of claim 4 wherein said Kd is no more than about 1×10^{-9} M.

6. **(Previously Amended)** The method of claim 3 wherein said antibodies also bind to murine receptor having a WSX motif.

7. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) have an IC50 in a KIRA ELISA of about 0.5 µg/ml or less.

8. **(Previously Amended)** The method of claim 7 wherein said antibodies have an IC50 in a KIRA ELISA of about 0.2 µg/ml or less.

9 - 10 **(Previously Cancelled)**

11. **(Previously Amended)** The method of claim 1 wherein said antibodies bind to the epitope bound by an antibody selected from the group consisting of 2D7 (ATCC

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Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

12. **(Previously Amended)** The method of claim 1 wherein said antibodies have complementarity determining region (CDR) residues from an antibody selected from the group consisting of 2D7 (ATCC Accession Number HB-12249), 1G4 (ATCC Accession Number HB-12243), 1E11 (ATCC Accession Number HB-12248) and 1C11 (ATCC Accession Number HB-12250).

13. -21. **(Previously Withdrawn)**

22. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) comprises hypervariable region residues of clone 3 antibody (SEQ ID NO: 48).

23. - 24. **(Previously Withdrawn)**

25. **(Previously Amended)** The method of claim 1 wherein said antibodies produced in step (a) are monoclonal antibodies.

26. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is a human antibody.

27. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is a humanized antibody.

28. **(Previously Amended)** The method of claim 1 wherein at least one of said antibodies produced in step (a) is an antibody fragment.

29. **(Previously Amended)** The method of claim 28 wherein said antibody fragment is an F(ab')₂.

30-33 **(Previously Withdrawn)**